

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1-357. Canceled.

358. (Currently Amended) A method for performing operations on a stainer in a stainer network comprising:

providing a robotic arm head coupled to the stainer;

establishing a network connection between a computer and a stainer in the stainer network;

sending ~~commands~~ requests from the computer to the stainer over the network connection;

inserting a first sample into the stainer;

processing a first sample with the stainer using the ~~commands~~ requests received from the first computer, wherein said processing comprises dispensing reagents to the sample with the robotic arm head; and

inserting a second sample into the stainer and optionally at least one reagent into the stainer during the processing of the first sample without interrupting the dispensing of reagents onto the first sample with the robotic arm head.

359. (Previously Presented) The method of claim 358, wherein the computer is a server and wherein the stainer is a client of the server.

360. (Previously Presented) The method of claim 359, wherein the server includes a centralized database including configuration information for the stainer.

361. (Previously Presented) The method of claim 358, wherein the stainer network is connected to a laboratory information system.

362. (Currently Amended) The method of claim 361, further including sending ~~commands and queries~~ requests from the laboratory information system to a server including a centralized database comprising information about the stainer, wherein the information includes status information on stainers, slides, consumables, and treatment protocols of the stainer.

363. (Currently Amended) The method of claim 362, wherein the ~~commands and queries~~ requests from the laboratory information system to the server including the centralized database further comprise database maintenance operations including information purging, information compaction, and database information back-up operations.

364. (Currently Amended) The method of claim ~~358~~ 360, further comprising: sending a request from the computer to running diagnostic tests on the stainer, storing diagnostic information in the centralized database,

retrieving the diagnostic information about the stainer from the centralized  
database[[,]] by the computer; and  
providing the diagnostic information to a user.

365. (Previously Presented) The method of claim 364, further comprising  
actively exercising components on the stainer as a diagnostic test.

366. (Canceled)

367. (Previously Presented) The method of claim 365, further comprising  
electronically notifying an operator about the results of the diagnostic tests.

368. (Previously Presented) The method of claim 358, further comprising  
performing automatic diagnostic operations on the stainer while operating other stainers  
in the stainer network, wherein the operations of the other stainers are not materially  
affected by the operations of the stainer.

369. (Previously Presented) The method of claim 358, further comprising  
monitoring by the computer a status of at least one of the first sample or the second  
sample in the stainer.

370. (Previously Presented) The method of claim 358, further comprising providing by the computer a real-time estimate of a completion time of the first sample being processed by the stainer.

371. (Cancelled)

372. (Currently Amended) A method for performing operations on a stainer in a stainer network comprising:

providing a robotic arm head coupled to the stainer;

establishing a network connection between a computer and a stainer in the stainer network;

sending requests ~~commands~~ from the computer to the stainer over the network connection;

sending requests ~~queries~~ from the laboratory information system to a server including a centralized database, wherein the centralized database contains status information chosen from slides on the stainer, amounts of consumables on the stainer or treatment protocols performed on the stainer;

inserting a first sample into the stainer;

processing a first sample with the stainer using the requests ~~commands~~ received from the computer, wherein said processing comprises dispensing reagents to the sample with the robotic arm head; and

inserting a second sample into the stainer and optionally at least one reagent into the stainer during the processing of the first sample without interrupting the dispensing of reagents onto the first sample with the robotic arm head.

373. (Previously Presented) The method of claim 372, wherein the stainer network further includes a server and a plurality of stainers including the stainer, and wherein the stainer is a client of the server.

374. (Previously Presented) The method of claim 373, wherein the server includes a centralized database comprising configuration information for the stainer.

375. (Currently Amended) The method of claim 372, wherein the ~~commands~~ and the ~~queries~~ requests further comprise database maintenance operations including information purging, information compaction, and database information.

376. (Currently Amended) The method of claim 372, wherein the stainer is a first stainer, the method further comprising:

providing a second stainer to be included in the stainer network;

checking by the computer for operational readiness ~~a malfunction~~ in the first stainer;

sending the requests ~~commands~~ to a second stainer when the first stainer ~~malfunctions~~ is not ready.

377. (Currently Amended) The method of claim 376, further comprising:  
sending requests from the computer to running diagnostic tests on the first or the  
second stainer ~~and,~~  
storing diagnostic information in the centralized database,  
retrieving the diagnostic information about the first or the second stainer from the  
centralized database by the computer; and  
providing the diagnostic information to a user.

378. (Previously Presented) The method of claim 377, further comprising  
actively exercising components on the first or the second stainer as a diagnostic test.

379. (Canceled)

380. (Previously Presented) The method of claim 378, further comprising  
electronically notifying an operator about the results of the diagnostic tests.

381. (Previously Presented) The method of claim 372, wherein the stainer is  
configured to be controlled from a remote location.

382. (Previously Presented) The method of claim 372, further comprising  
performing automatic diagnostic operations on the stainer while operating other stainers  
in the stainer network, wherein the operations of the other stainers are not materially  
affected by the operations of the stainer.

383. (Previously Presented) The method of claim 372, further comprising monitoring by the computer the status of at least one of the first sample or the second sample in the stainer.

384. (Previously Presented) The method of claim 372, further comprising providing by the computer a real-time estimate of the completion time of the first sample being processed by the stainer.

385. (Cancelled)